ABSTRACT

Method and apparatus for optical communications. An apparatus for optical communication includes the functionality of both a modulator and an optical transmitter. The modulator receives video data, typically in the digital data form, in the electrical or optical domain and converts it into suitable RF (radio frequency) signals which are then used to modulate a conventional optical (laser) transmitter. The optical transmitter outputs, on optical fiber, a suitable light signal for use in an optical communications network, for instance a cable TV or fiber to the premises system. The modulator and optical transmitter are included in a single apparatus and have a shared controller (e.g., microprocessor or microcontroller) which is suitable programmed so as to allow installation, set up and calibration jointly of the modulator and optical transmitter. Thereby installation/set up/calibration is accomplished more efficiently than if the modulator and optical transmitter were independently calibrated or tuned. By using a common controller and common user interface, intelligence in the controller can set operating parameters of both the modulator and the optical transmitter in some cases via closed loop operation thus substantially simplifying and reducing costs of installation.